# TITLE 326 AIR POLLUTION CONTROL BOARD

# SECOND NOTICE OF COMMENT PERIOD #99-125(APCB)

# DEVELOPMENT OF NEW RULES CONCERNING STYRENE EMISSIONS FROM THE REINFORCED PLASTICS COMPOSITES FABRICATING INDUSTRY

#### PURPOSE OF NOTICE

The Indiana Department of Environmental Management (IDEM) has developed draft rule language for a new rule concerning styrene emissions from the reinforced plastics composites fabricating industry. House Enrolled Act 1919 from the 1999 legislative session requires the air pollution control board to adopt rules for control of emissions from this industry. By this notice, IDEM is soliciting public comment on the draft rule language. IDEM seeks comment on the affected citations listed and any other provisions of Title 326 that may be affected by this rulemaking.

#### **HISTORY**

First Notice of Comment Period: July 1, 1999 Indiana Register (22 IR 3238).

**CITATIONS AFFECTED:** 326 IAC 8-1-6; 326 IAC 20-25.

**AUTHORITY:** IC 13-15-2-1; IC 13-17-3-4.

#### SUBJECT MATTER AND BASIC PURPOSE OF RULEMAKING

Styrene is a colorless, flammable, oily liquid that evaporates quickly; it has a sweet aromatic odor at low concentrations and a strong, penetrating disagreeable odor at high concentrations. Cigarette smoke and automobile exhaust contain small amounts of styrene. Exposure to styrene is most likely to occur from breathing indoor air that is contaminated with styrene vapors from building materials, tobacco smoke, and consumer products. Breathing styrene is most likely to affect the nervous system and may cause depression, concentration problems, muscle weakness, tiredness, nausea, and possible eye, nose, and throat irritation. The effects of exposure to any hazardous substance depends on the dose, the duration, how the exposure occurs, personal traits and habits, and whether other chemicals are present. The International Agency for Research on Cancer has determined that styrene is possibly carcinogenic to humans.

U. S. EPA has classified styrene as a hazardous air pollutant (HAP) and a highly reactive volatile organic compound (VOC). VOCs play a significant role in ground level ozone formation. The largest emitters of styrene in Indiana are manufacturers who use resins and gel coats containing styrene to produce reinforced plastic products, such as boats, recreational vehicles, bathtubs, and shower stalls. According to the Toxic Release Information Data for 1997, over two thousand (2000) tons of styrene were emitted by Indiana companies that are required to report emissions and seventy-five percent (75%) of those emissions occurred in the northern part of the state. Recent advances in application techniques and lower styrene content materials mean that manufacturers can and have significantly reduced their emissions. This rule will assure that the same emission reduction techniques will be required of all companies.

For several years, IDEM has been working with the reinforced plastics composites fabricating

industry to reduce styrene emissions from their operations. U. S. EPA is currently developing regulations that will require the use of "maximum available control technology" by the industry. These rules are scheduled to be proposed in the spring of 2000 and finalized by the end of the year. IDEM's recent activities include:

- establishing emission reduction requirements consistent with the anticipated maximum achievable control technology for all new fiber reinforced plastic sources;
- supporting industry efforts to develop and implement new pollution prevention technologies and emission reduction techniques;
- providing guidance to accurately calculate emissions;
- ensuring compliance through assistance, inspections, and monitoring;
- sharing information with the industry through workshops, fact sheets, web sites, meetings, mailings, and on-site assistance; and
- working with the Clean Manufacturing Technology And Safe Materials Institute and the Composite Fabricators Association.

Many state air requirements including the type of permit needed, control technology reviews and emission limitations, are triggered by emission levels. In most cases, emission factors are used as the basis for estimating emission levels. Typically, the emission factors approved for use by IDEM are found in the United States Environmental Protection Agency (U. S. EPA) compilation of emission factors, known as AP-42. However, in March 1998, U. S. EPA removed the AP-42 emission factors for certain open molding operations in the reinforced plastics composites fabricating industry: hand layup (manual application) and spray layup (mechanical application) of resin and gel coats and filament winding. EPA removed the AP-42 emission factors because it was determined they significantly underestimated emissions. In fact, available information indicates emissions are approximately two times greater than emissions calculated using the previously listed emission factors in AP-42.

There are practical consequences associated with changes in emission estimating methods which result in higher estimates. For example, a company might have agreed to emission limitations that keep the source "a minor source" to avoid a Best Available Control Technology (BACT) determination, as a part of a BACT determination, or to avoid major new source review requirements, major prevention of significant deterioration review requirements, or being a major modification of a major source. These consequences include the need to redetermine applicability of permitting requirements, check compliance with previously established emission limitations, and revise annual emission reporting. On November 1, 1999, a nonrule policy document for interim guidance was published in the Indiana Register which describes the policies and procedures that IDEM will use to address the change in the emission factors for emissions of styrene from sources in the reinforced plastics composites fabricating industry until a rule is promulgated.

During the Indiana 1999 legislative session, House Enrolled Act 1919 was enacted which requires the air pollution control board to adopt rules by December 31, 2000 to establish appropriate standards for control of air pollution from new and existing sources in the reinforced plastics composites fabricating industry. The air pollution control board must consider all available information when adopting the rules, including available control technologies, industry work practices, materials available to the industry, and recommendations by the clean manufacturing technology institute.

This second notice of rule making contains draft rule language to establish applicability, emission standards, work practice standards, operator training, and testing, recordkeeping and reporting requirements for open molding process emission units that emit styrene. Lower styrene content resins and gel coats and nonatomized application of resins and gel coats limit styrene emissions by limiting exposed surface area for evaporation. The control options are techniques to prevent emissions rather than controlling the air contaminants once they are emitted. A public meeting was held in Goshen on November 10, 1999 to solicit input from the general public and affected owners and operators.

IDEM solicits comments concerning appropriate types of controls, manufacturing techniques, applicable processes, transitional implementation issues, and compliance and permitting requirements.

# SUMMARY/RESPONSE TO COMMENTS FROM THE FIRST COMMENT PERIOD

IDEM requested public comment from July 1, 1999 through July 30, 1999 on alternative ways to achieve the purpose of the rule and suggestions for the development of draft rule language. IDEM received comments from the following parties by the comment period deadline:

Citizens Action Coalition	(CAC)
National Marine Manufacturers Association	(NMMA)
Save the Dunes Council	(SDC)

Other comments were received after July 30, 1999 and were considered in drafting rule language.

Following is a summary of the comments received and IDEM's responses thereto.

Comment: Styrene is classified as a hazardous air pollutant. Therefore, IDEM should regulate styrene for both new and existing sources as a hazardous air pollutant. The list of current activities contained in the First Notice of Comment Period appears to form a basis on which to develop a regulatory program to effectively regulate this HAP for new and for the many existing sources. Why would the agency solicit comments on the regulatory status of styrene when it appears that the chemical's regulatory status has already been determined? (CAC) (SDC)

*Response:* What IDEM is developing, as directed by HR1919, is a styrene rule. The substantive requirements of the rule that IDEM has drafted are not determined by whether the rule is considered a VOC rule or a HAP rule. They would be the same in either case. However, since U. S. EPA intends to promulgate an air toxics rule for styrene emissions, IDEM believes it is most appropriate for Indiana air rules to include this rule in the air toxics rules.

*Comment:* The emission factor developed for styrene has been found to underestimate emissions by fifty percent (50%). The appropriate emissions factor must also be dealt with in the development of new rules. (SDC)

*Response:* The "Unified Emission Factors for Open Molding of Composites" issued in April 1999 will be included in the rule.

*Comment:* Although not the subject of this notice, the storage of styrene at the Port of Indiana in Portage is a concern where at least one spill has occurred. (SDC)

*Response:* Spills into the waters of the state are regulated under 327 IAC 2-6.1, Spills; Reporting, Containment, and Response, that contains the rules for spills of hazardous substances,

extremely hazardous substances, petroleum, and objectionable substances, which includes styrene. The rule that is contemplated by the First Notice will regulate styrene air emissions from the reinforced plastics composites fabricating industry and contain work practice standards that will help prevent spills.

*Comment:* As development of these rules proceeds, the public should be kept informed, including being informed of the comments received from this first notice and IDEM's response to these comments. (SDC)

Response: IDEM is required to publish a response to all comments received during a formal comment period in the Indiana Register. This Second Notice of Comment Period includes the comments and IDEM's responses to comments received during the first comment period. Additionally, IDEM is informing the public with mailings, web site postings at <a href="https://www.state.in.us/idem/ctap/fiber/rule.html">www.state.in.us/idem/ctap/fiber/rule.html</a>, and public meetings in South Bend, Goshen, and Indianapolis.

*Comment:* NMMA questions whether HB 1919 Section 21 requires IDEM to establish rules for the boat manufacturing industry or the reinforced plastics composites fabricating industry or both. Even though IDEM has contacted boat manufacturers regarding the rule's development, nowhere in the statute is boat manufacturing mentioned. (NMMA)

*Response*: HEA 1919, Section 21(c) requires the air pollution control board to establish appropriate standards for control of air pollution from new and existing sources in the reinforced plastics composites fabricating industry. If facilities manufacture boats by a reinforced plastics composites fabricating process, then these companies are subject to the legislation.

Comment: NMMA is not opposed to Indiana promulgating a state styrene emission regulation, providing it is consistent with national standards and treats boat manufacturing as a separate category, consistent with 42 USC 7412(c)(8), the National Emission Standards for Hazardous Air Pollutants (NESHAP) program. This statute states that, "when establishing emission standards for styrene, the Administrator shall list boat manufacturing as a separate subcategory, unless the Administrator finds that such a listing would be inconsistent with the goals and requirements of this Act." Congress identified the differences between reinforced plastics and boat building in its "1998 Report of the Committee On Environmental and Public Works, United States Senate to accompany S 1630." In this report, Congress supported a separate subcategory based on its determination that, "emissions from the recreational boat building industry are far greater in air volume and lower in styrene content than similar emissions from other segments of the reinforced plastics industry." Congress further stated that "requiring the same technology-based emission standards for boat manufacturing as are mandated for other segments of the reinforced plastics industry may impose disproportional costs on boat builders." NMMA recommends that if IDEM determines that it is mandated to develop an emission standard for boat manufacturing, that it strongly consider two important points. First, the rule must treat boat manufacturing separate from reinforced plastics, and second, the rule must be consistent with the national standards.

The reason why Indiana has enjoyed a strong manufacturing economy is because it provides a level playing field consistent with federal regulations. NMMA is concerned that an emission standard that is not consistent with the EPA national MACT standards for boat manufacturing could create a competitive disadvantage for Indiana boat builders, with no measurable environmental gain.

EPA plans to have a draft proposal complete by early September and publish a NPRM in the Federal Register in early 2000. Under the current plan, the schedule for the EPA final MACT

standard will harmonize with HEA 1919's mandated styrene emission standard. Both will be finalized, or will be close to being finalized, around December 2000. NMMA recommends that the emission standards for both regulations also be harmonized. (NMMA)

*Response:* The draft rule applies to open molding processes in the reinforced plastics and boat manufacturing; it does not apply to the many other types of processes at these industries. The similarity in the open molding processes for both industries does not justify separate rules. IDEM plans to develop rule language that will not conflict with the maximum achievable control technology national emission standards for hazardous air pollutants. IDEM understands the difficulty that can be posed by inconsistent state and federal regulations.

# REQUEST FOR PUBLIC COMMENTS

This notice requests the submission of comments on the draft rule language, including suggestions for specific revisions to language to be contained in the draft rule. Mailed comments should be addressed to:

#99-125(APCB)styrene

Janet McCabe

**Assistant Commissioner** 

Office of Air Management

Indiana Department of Environmental Management

P.O. Box 6015

Indianapolis, Indiana 46206-6015.

Hand delivered comments will be accepted by the receptionist on duty at the tenth floor reception desk, Office of Air Management, 100 North Senate Avenue, Indianapolis, Indiana, Monday through Friday between 8:15 a.m. and 4:45 p.m.

Comments may be submitted by facsimile at the IDEM fax number: (317) 233-2342, Monday through Friday between 8:15 a.m. and 4:45 p.m. Please confirm the timely receipt of faxed comments by calling the Rules Development Section at (317) 233-0430.

#### COMMENT PERIOD DEADLINE

Comments must be postmarked, hand delivered, or faxed by January 31, 2000.

Additional information regarding this action may be obtained from Jean Beauchamp, Rules Development Section, Office of Air Management, (317) 232-8424 or (800) 451-6027, press 0 and ask for 2-8424 (in Indiana).

#### **DRAFT RULE**

SECTION 1. 326 IAC 20-25 IS ADDED TO READ AS FOLLOWS:

#### Rule 25. Emissions from Reinforced Plastics Composites Fabricating Emission Units

Authority: IC 13-14-8; IC 13-15-2-1; IC 13-17-3-4

Affected: IC 13-17-3

326 IAC 20-25-1 Applicability

Authority: IC 13-14-8; IC 13-15-2-1; IC 13-17-3-4; IC 13-17-3-11

**Affected: IC 13-17-3** 

Section 1. (a) This rule applies to owners or operators of sources that emit or have the potential to emit ten (10) tons per year of any hazardous air pollutant (HAP) or twenty-five (25) tons per year of any combination of HAPs, and that meet all of the following criteria:

- (1) Manufacture reinforced plastics composites parts or products.
- (2) Apply and cure resins or gel coats that contain styrene using the open molding process.
- (3) Have actual emissions of styrene equal to or greater than two (2) tons per year.
- (b) Compliance with the requirements of this rule shall satisfy the requirements of 326 IAC 8-1-6. (Air Pollution Control Board; 326 IAC 20-25-1)

#### **326 IAC 20-25-2 Definitions**

Authority: IC 13-14-8; IC 13-15-2-1; IC 13-17-3-4; IC 13-17-3-11

Affected: IC 13-17-3

# Section 2. The following definitions apply throughout this rule:

- (1) "Affected emission unit" means an emission unit that must comply with this rule.
- (2) "Air-assisted airless spray technology" means a coating application system in which the coating fluid (including a paint, gel coat, or resin) is supplied to the gun under fluid pressure and air is combined at the spray cap of the gun.
- (3) "Airless spray technology" means a coating application system in which the coating fluid (including a paint, gel coat, or resin) is supplied to the gun under fluid pressure and air is not added to the gun.
- (4) "As applied" means the coating or adhesive that is actually used for coating or gluing the substrate. It includes the contribution of materials used for in-house dilution of the coating or adhesive.
- (5) "Clear gel coat" means a gel coat that contains no pigments.
- (6) "Compression molding" means the use of a prepared compound such as sheet molding compound (SMC) composed of resin and fiberglass fibers and a large hydraulic press to produce fiber reinforced plastic parts. The SMC is forced into all areas of the mold under several tons of pressure by a hydraulic press.
- (7) "Emission control device" has the meaning set forth in 326 IAC 1-2-3.
- (8) "Existing sources" means sources or emission units for which the owner or operator has received all necessary construction or modification permits prior to June 28, 1998.
- (9) "Filled resin" means a resin containing inert filler material.
- (10) "Flow coater" means a nonatomized application from which the resin leaves the tip of the applicator in continuous consolidated streams rather than as an atomized spray.
- (11) "Gel coat" means a thermosetting resin surface coating, either pigmented or clear, that contains styrene (CAS. No. 100-42-5) that provides a cosmetic enhancement or protects the underlying layers of a plastic composites material. Gel coat does not include thermoplastic material such as polyethylene or thermosetting coatings that do not contain styrene such as epoxies.
- (12) "Gel coat HAP content" means the HAP content of the gel coat supplied by the gel coat manufacturer, plus any HAP added to the gel coat by the owner or operator (for

example, as a thinner).

- (13) "Hazardous air pollutant" "HAP" has the meaning set forth in 326 IAC 1-2-33.5.
- (14) "High-volume, low-pressure air atomized spray technology" means a coating application system that is operated at an air pressure of less than ten (10) pounds per square inch gauge (psig) at the air cap of the spray gun.
- (15) "Inert filler" means any non-HAP material, such as silica micro-spheres or micro-balloons, added to a resin or gel coat to decrease the density of the resin or gel coat or change other physical properties of the resin or gel coat.
- (16) "Mold" means a hollow form or matrix for shaping a liquid or plastic substance.
- (17) "Neat basis" means resins that are not diluted with other substances.
- (18) "New sources" are those sources that must comply with 326 IAC 2-4.1-1.
- (19) "Non-spray resin application technology" means any application technology in which the resin is not atomized or broken into droplets or aerosols as it is applied to the part being manufactured. This technology includes, but is not limited to those technologies commonly referred to as flow coaters (with chopped glass roving), pressure fed rollers, resin impregnators, and hand application (bucket and paint brush or paint roller).
- (20) "Open molding process" means any process in which the resin or gel coat is placed in the mold by hand, brushing, spraying, filament winding or other means, whereby the resulting surface is open to the surrounding air, or has the potential to be open to the surrounding air, during resin application and curing.
- (21) "Pigmented resins" means a resin that contains a coloring substance.
- (22) "Production resin" means any thermosetting resin that contains styrene (CAS No. 100-42-5), methyl methacrylate (CAS No. 80-62-6) or both and that is used to manufacture parts or products. Production resins do not include tooling resins, thermoplastic resins (for example, rotationally molded polyethylene), or thermosetting resins that do not contain styrene or methyl methacrylate (for example, epoxies).
- (23) "Production gel coat" means a gel coat that is used to manufacture parts and products.
- (24) "Reconstruction" has the meaning as set forth in 326 IAC 1-2-65.
- (25) "Resin" is a viscous substance of plant origin used principally in varnishes, adhesives, synthetic plastics, and pharmaceuticals and used as set forth in subdivision (22).
- (26) "Resin HAP content" means the HAP content of the resin supplied by the resin manufacturer, plus any HAP added to the resin by the owner or operator (for example, as a thinner) and not including any inert fillers added to the resin.
- (27) "Resin roller" means a fabric roller that is fed a continuous supply of catalyzed resin from a mechanical fluid pump.
- (28) "Resin transfer molding" means the process where resin is forced into a closed mold.
- (29) "Tooling gel coat" means the gel coat used in the construction or repair of molds or prototypes (plugs).
- (30) "Tooling resin" means the resin used in the construction or repair of molds or prototypes (plugs).
- (31) "Vacuum bagging" means a partially closed molding technology where after resin has been applied, a flexible cover is placed over the wet surface, sealed, and a vacuum pump is used to draw the air out from under the cover and press the cover down onto the part.

- (32) "Vapor suppressed resin" is a polyester resin material which contains additives to reduce VOC evaporation loss to less than sixty (60) grams per square meter of surface area as determined and certified by resin manufacturers.
- (33) "Volatile organic compound" (VOC) has the meaning set forth in 326 IAC 1-2-90. (Air Pollution Control Board; 326 IAC 20-25-2)

#### 326 IAC 20-25-3 Emission Standards

Authority: IC 13-14-8; IC 13-15-2-1; IC 13-17-3-4; IC 13-17-3-11

Affected: IC 13-17-3

Section 3. (a) Except as provided in subsections (d), (e), and (g), within one year of the effective date of this rule, owners and operators of sources subject to this rule shall comply with the emission standards of this section, The total HAP monomer content, excluding any filler or reinforcing material, of the following materials shall be limited depending on the application method as specified in the table below:

	HAP Monomer
<b>Material and Application Method</b>	Content, weight %
Resin, Manual Application	
Production-Corrosion Resistant	40
<b>Production-Non-Corrosion Resistant</b>	32
Tooling	36
Resin, Mechanical Application	
Production-Corrosion Resistant	38
Production-Non-Corrosion Resistant Unfilled	35
<b>Production-Non-Corrosion Resistant Filled</b>	35
Tooling	43
Gel Coat Application	
Pigmented	37
Clear Production	37
Tooling	38
Resin, Filament Winding	•
Corrosion Resistant	18
Non-Corrosion Resistant	19

- (b) Except as provided in subsection (e), non-corrosion resistant, unfilled resins shall be mechanically applied by any of the following kinds of non-spray equipment:
  - (1) Flow coaters.
  - (2) Pressure fed rollers.
  - (3) Resin impregnators.
- (c) Unless specified in subsection (b), gel coat application and mechanical application of resins shall be by any of the following spray equipment:
  - (1) High volume, low pressure.
  - (2) Airless.

- (3) Air-assisted airless.
- (d) A source that was issued a permit pursuant to 326 IAC 2, on or after June 28, 1998, but prior to the effective date of this rule, and that obtained a revised best available control technology (BACT) determination in the permit for affected emission units, shall not be subject to the provisions of this section until such time as the permit is renewed, or the source undergoes a modification that increases the potential to emit styrene.
- (e) A new or reconstructed affected emission unit that must comply with 326 IAC 2-4.1-1 shall be exempt from this section.
- (f) A source may comply using monthly emission averaging within each specific material and application category listed in subsection (a) without prior approval by the commissioner.
- (g) Upon written application by the source, the commissioner may approve the following:
  - (1) Enforceable alternative emission reduction techniques that are at least equally protective of the environment as the emission standards in subsections (a) through (c).
  - (2) In addition to subsection (f), a source may employ monthly emissions averaging to meet a standard. The source shall show that emissions did not exceed the emissions that would have occurred if each affected emission unit had met the requirements of subsections (a) through (c) and may use any combination of the following emission reduction techniques:
    - (A) Resins or gel coats with HAP monomer contents lower than specified in subsection (a).
    - (B) Vapor suppressed resins.
    - (C) Vacuum bagging or other similar technique where resin is applied without exposure to the air, not to include resin transfer molding or compression molding.
    - (D) Process controls, post-process, or add-on controls where the emissions are estimated based on parametric measurements or stack monitoring.
    - (E) Controlled spray used in combination with automated actuators or robots.
    - (F) Controlled spray that contains all of the following elements:
      - (i) Mold flanges.
      - (ii) Spray technique.
      - (iii) Spray gun pressure.
      - (iv) Means of verifying continuous use of this technique such as mass balance of materials and products (surface area and thickness of product), as approved by the department in advance of implementation.
    - (G) Emission reduction techniques approved under subdivision (1) of this subsection.
    - (H) Sources using averaging shall not use spray equipment that produces higher emissions than the equipment specified in subsection (c).
  - (h) To determine emission estimates, the following references or methods shall be used:
  - (1) "Unified Emission Factors for Open Molding of Composites" April 1999\*, except controlled spray emission factors cannot be used unless approved by the department.
  - (2) "Compilation of Emission Factors", Volume 1, Fifth Edition, January 1995\*, and supplements, except hand layup, spray layup and filament winding.

(3) Site specific values or other means of quantification if the site specific values and the emission factors are accepted by the department and the U. S. EPA.

\*These documents are incorporated by reference and are available for review at the Office of Air Management, Department of Environmental Management, Indiana Government Center-North, 100 North Senate Avenue, Indianapolis, Indiana or for purchase from U. S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, North Carolina 27711. (Air Pollution Control Board; 326 IAC 20-25-3)

#### 326 IAC 20-25-4 Work Practice Standards

Authority: IC 13-14-8; IC 13-15-2-1; IC 13-17-3-4; IC 13-17-3-11

**Affected: IC 13-17-3** 

Section 4. (a) Each owner or operator of a source or emission unit subject to this rule shall prepare, update, and maintain a written work practice implementation plan that addresses the work practice standards in subsections (b) and (c). The written work practice implementation plan shall be available for inspection upon request. If the commissioner determines that the work practice implementation plan does not adequately address each work practice standard or that the plan does not include sufficient mechanisms for ensuring that the work practice standards are being implemented, the commissioner may require the source to modify the plan. Revisions or modifications to the plan do not require a revision of the source's Part 70 operating permit.

- (b) Plant-wide, the following general work practices shall be implemented:
- (1) Solvents with no HAP content shall be used for clean-up operations.
- (2) Storage and transfer containers for HAP-containing materials shall be kept covered when not in use.
- (3) Solvents sprayed during clean-up or resin changes shall be directed into solvent collection containers.
- (4) Solvent collection containers shall be kept closed when not in use and waste solvent shall be reused onsite or properly managed offsite. Containers accumulating waste VOC and HAP containing materials and waste solvent which are subject to Resource Conservation and Recovery Act (RCRA) hazardous waste standards shall be managed in accordance with 40 CFR 260 through 270 (July 1, 1998)\*.
- (5) Clean-up rags with solvent shall be stored, transported, and disposed of in sealed containers. Clean up materials, including rags and other wipes, may be subject to RCRA hazardous waste regulations found at 40 CFR 260 through 270 (July 1, 1998)\*, and must be managed accordingly.
- (6) Spray equipment shall be of a design that can be cleaned without requiring solvent to be sprayed into the air.
- (c) Each owner or operator of a source or process that formulates resin or gel coat materials at the source shall comply with all of the following work practice standards:
  - (1) Use closed containers for the storage of the following:
    - (A) All production or tooling resins or gel coat materials, including waste resin and gel coat materials.

- (B) Cleaning materials, including waste cleaning materials.
- (C) Resin-based core materials, putties, or adhesives.
- (D) Other materials that contain HAPs.
- (2) A cover shall be in place on any tank, vat, or vessel with a capacity greater than seven and five-tenths (7.5) liters (two (2) gallons), including containers in which resin or gel coat materials are delivered to the facility, while resin or gel coats are being formulated. The cover shall meet all of the following requirements:
  - (A) Completely cover the tank, vat, or vessel opening except an opening no larger than necessary to allow safe clearance for a mixer shaft.
  - (B) Extend at least one and three-tenths (1.3) centimeter (five-tenths (0.5) inches) beyond the outer rim of the opening or be attached to the rim.
  - (C) Remain closed unless adding or removing material or when sampling or inspection procedures require access.
  - (D) Be maintained in a condition such that, when in place, the cover maintains contact with at least ninety percent (90%) of the circumference of the rim.
- (3) When a mixer, used for formulation of resin-based or gel coat-based material, is being removed from a tank, vat, or vessel, the material contained in the mixer blades shall drain back into the tank, vat, or vessel before the mixer is completely removed from the tank, vat, or vessel.

\*Copies of the Code of Federal Regulation (CFR) referenced in this section may be obtained from the Government Printing Office, Washington, D. C. 20204 or the Office of Air Management, Department of Environmental Management, Indiana Government Center-North, 100 North Senate Avenue, Indianapolis, Indiana 46204. (Air Pollution Control Board; 326 IAC 20-25-4)

# 326 IAC 20-25-5 Operator Training

Authority: IC 13-14-8; IC 13-15-2-1; IC 13-17-3-4; IC 13-17-3-11

Affected: IC 13-17-3

- Section 5. (a) Each owner or operator shall train all new and existing personnel, including contract personnel, who are involved in resin and gel coat spraying and spray-like applications, for example, those applications that could result in excess emissions if performed improperly.
  - (b) All personnel hired after the effective date of this rule shall be trained upon hiring.
- (c) All personnel hired before the effective date of this rule shall be trained within six (6) months of the effective date of this rule.
  - (d) All personnel shall be given refresher training annually.
- (e) Personnel who have been trained by another owner or operator subject to this rule are exempt from subsection (b) of this section if written documentation that the employee's training is current is provided to the new employer.
  - (f) The source shall maintain a copy of the training program consistent with section 7 of

this rule. The training program shall include, at a minimum, all of the following:

- (1) A list of all current personnel by name and job description that are required to be trained and the date they are trained.
- (2) An outline of the subjects to be covered in the initial and refresher training for each position or group of personnel.
- (3) Lesson plans for courses to be given at the initial and the annual refresher training that include, at a minimum all of the following:
  - (A) Appropriate application techniques.
  - (B) Appropriate cleaning and wash-off procedures.
  - (C) Appropriate equipment setup and adjustment to minimize material usage and overspray.

Training as specified under 40 CFR 265.16 (July 1, 1998)\* for RCRA hazardous waste may be used for appropriate management of cleanup wastes.

(4) A description of the methods to be used at the completion of initial and refresher training to demonstrate and document successful completion of the course.

\*Copies of the Code of Federal Regulation (CFR) referenced in this section may be obtained from the Government Printing Office, Washington, D. C. 20204 or the Office of Air Management, Department of Environmental Management, Indiana Government Center-North, 100 North Senate Avenue, Indianapolis, Indiana 46204. (Air Pollution Control Board 326 IAC 20-25-5)

# 326 IAC 20-25-6 Testing Requirements

Authority: IC 13-14-8; IC 13-15-2-1; IC 13-17-3-4; IC 13-17-3-11

Affected: IC 13-17-3

Section 6. (a) An initial performance test is required when using process controls, post process controls, or add-on controls to demonstrate compliance with section 3. This test shall be performed in accordance with 326 IAC 3-6, Source Sampling Procedures, and 40 CFR 63.7, (July 1, 1998)\* Performance Testing Requirements.

- (b) When using process controls, post-process controls, or add-on controls to demonstrate compliance with the standards in section 3, the following test methods shall be used:
  - (1) 40 CFR 60, Method 25/25A, Appendix A, (July 1, 1998)\* shall be used to measure total hydrocarbon emissions.
  - (2) 40 CFR 60, Method 18, Appendix A, (July 1, 1998)\* shall be used to measure styrene and methyl methacrylate emissions.
  - (3) 40 CFR 60, Method 204, Appendix A, (July 1, 1998)\* shall be used to determine capture efficiency. As an alternative to the procedures specified in 40 CFR 60, Method 204, Appendix A, (July 1, 1998)\*, an owner or operator required to conduct a capture efficiency test may use any capture efficiency protocol and test methods that satisfy the criteria of either the Data Quality Objective (DCQ) or the Lower Confidence Limit (LCL) approach as described in the EPA Guidelines for Determining Capture Efficiency which is also reference in Appendix A to Subpart KK to Part 63 (July 1, 1998)\*. The owner or operator may exclude work stations that have never been controlled from such capture efficiency determinations.

- (c) Compliance with the HAP monomer content and usage limitations shall be determined using the manufacturer's certified product data sheet. Additionally, compliance may be determined by sampling and analysis, using any of the following test methods as applicable:
  - (1) 40 CFR 60, Method 24, Appendix A, (July 1, 1998)\* shall be used to measure the total volatile HAP content of resins, and gel coats. Method 24 may be modified for measuring the volatile HAP content of resins or gel coats to require that the procedure be performed on un-catalyzed resin or gel coat samples.
  - (2) 40 CFR 63, Method 311, Appendix A, July 1, 1998)\* shall be used to measure HAP content in the resins and gel-coats by direct injection into a gas chromatograph.

\*Copies of the Code of Federal Regulation (CFR) referenced in this section may be obtained from the Government Printing Office, Washington, D. C. 20204 or the Office of Air Management, Department of Environmental Management, Indiana Government Center-North, 100 North Senate Avenue, Indianapolis, Indiana 46204. (Air Pollution Control Board; 326 IAC 20-25-6)

# 326 IAC 20-25-7 Recordkeeping Requirements

Authority: IC 13-14-8; IC 13-15-2-1; IC 13-17-3-4; IC 13-17-3-11

Affected: IC 13-17-3

Section 7. (a) To document compliance with this rule, a source shall maintain records as follows:

- (1) Records shall be maintained and shall be complete and sufficient to establish compliance with the requirements of section 3 of this rule.
- (2) Records shall include purchase orders, invoices, material safety data sheets (MSDS), manufacturer's certified product data sheets, calculations and other records to confirm compliance with the provisions of this rule. Whenever a MSDS or certified product data sheet specifies a range for any ingredient, the largest value shall be used for determining compliance with this rule.
- (3) Compliance documentation shall include:
  - (A) The usage by weight and HAP monomer content of each resin and gel coat.
  - (B) A log of the dates of use.
  - (C) Method of application and other emission reduction techniques for each resin and gel coat used.
  - (D) The calculated total volatile organic HAP emissions from resin and gel coat use for each month.
- (b) The owner or operator shall maintain records of all information (including all training records, reports and notifications) required by this rule. Such records shall be recorded in a form suitable and readily available for inspection and review. The records shall be retained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, or record. At a minimum, the most recent two (2) years of data shall be retained on site. The remaining three (3) years of data may be retained off site. Such records may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

(c) If an owner or operator determines that his or her source is not subject to this rule, the owner or operator shall keep a record of the applicability determination on site at the source until the source changes its operation to become subject to this rule. The record of the applicability determination shall include an analysis, or other information, that demonstrates why the owner or operator believes the source is not subject to this rule. If an existing source becomes subject to this rule, the owner or operator must comply with the rule and submit an operating permit application within one (1) year of becoming subject to the rule. (Air Pollution Control Board; 326 IAC 20-25-7)

# 326 IAC 20-25-8 Reporting Requirements

Authority: IC 13-14-8; IC 13-15-2-1; IC 13-17-3-4; IC 13-17-3-11

**Affected: IC 13-17-3** 

Section 8. (a) The owner or operator shall submit a compliance status report covering the previous six (6) months of operations to the commissioner as follows:

- (1) The first report shall be submitted on or before January 31, 2002 for the compliance period July 1, 2001 to December 31, 2001.
- (2) Subsequent reports shall be submitted on or before the thirty-first ( $31^{st}$ ) day of July for compliance period January 1st to June  $30^{th}$  or the thirty-first (31st) day of January for the compliance period July  $1^{st}$  to December  $31^{st}$ .
- (b) Sources using monthly averaging of emissions to meet the standard shall report their compliance quarterly. (Air Pollution Control Board; 326 IAC 20-25-8)

SECTION 2. 326 IAC 8-1-6 IS AMENDED TO READ AS FOLLOWS:

#### 326 IAC 8-1-6 New facilities; general reduction requirements

Authority: IC 13-1-1-4; IC 13-7-7

Affected: IC 13-1-1-1; IC 13-1-1-4; IC 13-7-1-1; IC 13-7-7-5

- Sec. 6. (a) New facilities (as of January 1, 1980), which have potential emissions of 22.7 megagrams (25 tons) or more per year, located anywhere in the state, which are not otherwise regulated by other provisions of this article (326 IAC 8), shall reduce VOC emissions using best available control technology (BACT).
- (b) Emission units, located anywhere in the state, commencing construction on or after the effective date of 326 IAC 20-25 that have a potential to emit twenty-two and seven tenths (22.7) megagrams, twenty five (25) tons, or more per year of volatile organic compounds (VOCs) and are not otherwise regulated by other provisions of this article (326 IAC 8), shall reduce VOC emissions using best available control technology BACT).
- (c) Emission units, located anywhere in the state, commencing construction on or after the effective date of 326 IAC 20-25 that must comply with 326 IAC 20-25, Emissions from Reinforced Plastics Composites Fabricating Emission Units, are exempt from the requirements of this section. (Air Pollution Control Board; 326 IAC 8-1-6; filed Mar 10, 1988, 1:20 pm: 11 IR 2530)

# **Notice of First Meeting/Hearing**

Under IC 4-22-2-24, IC 13-14-8-6, and IC 13-14-9, notice is hereby given that on May 3, 2000 at 1:00 p.m., at the Indiana Government Center-South, 402 West Washington Street, Conference Center Room A, Indianapolis, Indiana, the Air Pollution Control Board will hold a public hearing on new rule 326 IAC 20-25.

The purpose of this hearing is to receive comments from the public prior to preliminary adoption of these rules by the board. All interested persons are invited and will be given reasonable opportunity to express their views concerning the proposed new rule. Oral statements will be heard, but for the accuracy of the record, all comments should be submitted in writing. Procedures to be followed at this hearing may be found in the April 1, 1996 Indiana Register, page 1710 (19 IR 1710).

Additional information regarding this action may be obtained from Jean Beauchamp, Rules Development Section, Office of Air Management, (317) 232-8424 or (800) 451-6027, press 0 and ask for 2-8424 (in Indiana). If the date of this hearing is changed it will be noticed in the Change of Notice section of the Indiana Register.

Individuals requiring reasonable accommodations for participation in this event should contact the Indiana Department of Environmental Management, Americans with Disabilities Act coordinator at:

Attn: Sandie Meanor, ADA Coordinator Indiana Department of Environmental Management 100 North Senate Avenue P.O. Box 6015 Indianapolis, Indiana 46206-6015

or call (317) 233-1785. Speech and hearing impaired callers may contact the agency via the Indiana Relay Service at 1-800-743-3333. Please provide a minimum of 72 hours' notification. Copies of these rules are now on file at the Office of Air Management, Indiana Department of Environmental Management, Indiana Government Center-North, 100 North Senate Avenue, Tenth Floor East, Indianapolis, Indiana and are open for public inspection.